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PREFACE

The present volume of "Avis préalables" constitutes the last phase in the documentation of the nomenclature proposals that are being submitted to the Nomenclature section of the Paris Congress.

It contains a number of general considerations submitted by various botanists, of which it may be expected that they will form a valuable guide in the discussions that will lead to the final decisions. Further a number of proposals received after the issue of the "Recueil Synoptique", some official motions regarding "nomina conservanda" and finally the result of the preliminary mail-vote are included.

The total number of votes was 315, but not one of the proposals got this maximum vote. The votes were accompanied by a fairly large collection of additional remarks for which I am very grateful, but to which I could not always answer by letter. I hope that my correspondents will understand this.

The result of the preliminary vote deserves in my opinion a careful study. In many instances it will facilitate a decision, especially when the voters have clearly expressed their mind to retain the original text. However, in those cases where questions of fundamental importance are involved, I feel bound to warn against decisions that would rest on an undue confidence in the value of the preliminary vote. The proposal regarding the "nomina specifica rejicienda" and that concerning the so called "50-years rule" may serve as examples. It seems to me that such revolutionary changes should never be carried into effect on the authority of a simple majority. We should realize that the voters are but a group of more or less accidentially collected persons and that the opinion of a small majority can therefore not be regarded as illustrative of the general opinion. Now already we can see that there is a great deal of uneasiness among our colleagues with regard to the solution of these questions. It seems to me that in such cases a certain conservatism is indicated and that it will be wise to adhere to the old adagium "in dubio abstine".

J. LANJOUW

ON ORTHOGRAPHIC CHANGES

by

H. W. Rickett (New York)

In the flood of proposals for conservation of generic names submitted to the Seventh International Botanical Congress and printed in the *International Code of Botanical Nomenclature* are many which seek only to establish spellings different from those of the original authors of the names.

A legitimate change in the original spelling of a generic name may be made in two ways: by showing that the original name contained an "orthographic or typographic error" and is therefore subject to correction under Article 82; or by conserving the name in a later spelling. Otherwise we are required to maintain the original spelling.

It is possible to quibble about what constitutes an "error." An orthographic error may be simply a mistake in transcription, as when Linnaeus wrote *Befaria* for Mutis' *Bejaria* (commemorating José Bejar); or due to bad etymology, as when Haworth wrote *Mammillaria* (derived from *mamilla*, of which *mammilla* is a bad form). But there has been a tendency to treat a spelling (particularly a latinization of a modern personal name or of a "barbarous" name) as free from error if it was *deliberately* adopted by its author, even if we regard his version as philologically unsound or inappropriate in any other way. That curious etymological mess *Melandrium* exemplifies this trend (see Kew Bull. 1928 : 357). The retention of *Mammillaria* is advocated on the same grounds. *Valantia* and *Clutia* are cited in the Code (p. 44) as examples of deliberate latinization of personal names and therefore not to be regarded as orthographically erroneous; *Leysera* is perhaps another example. Similar remarks apply to specific epithets. Many of the older botanists wrote "pensylvanicus" deliberately and with reason; the omission of one of the n's which modern orthography demands was not an error on their part. According to the rules we must write *Carex pensylvanicus* and *Acer pensylvanicum* (but *Crataegus pennsylvanica*).

In fact it is not easy to demonstrate an error. *Matthiola*, for instance, was published by Robert Brown as *Mathiola*. Since Mattioli latinized his name as Matthiolus, the spelling has been generally corrected; but there have been opinions to the contrary (see Jour. Bot. 25 : 153). It is debatable whether or not the name *Bourreria* was accidentally mis-spelled by Patrick Browne. He said he named it after "Mr Bourer", who was actually Johann Ambrosius Beurer; and it is spelled *Beureria* in the index. One version seems no more appropriate than the other to the Latin language, and it is hard to imagine that Browne would deliberately change the first syllable of the name; but Sprague, though he recommends correcting the "ou" to "eu", argues for the retention of both r's (Kew Bull. 1928 : 347).

Notice, moreover, that "the liberty of correcting a name must be used with reserve, especially if the change affects the first syllable, and above all the first letter of the name" (Art. 82, Note 3). We are adjured not to change *Lespedeza* to *Cespedeza*, though the former spelling is unquestionably erroneous, since the genus commemorates Vicente Manuel de Céspedes. The same applies to an initial aspirate, which may or may not have been accidentally omitted (as in *Eleocharis*).

Again, corrections made on etymological grounds may be at fault. This is well illustrated by the name *Erythronium messachoreum* ("which means the Midland Erythronium"). Few have seen the obscure original publication, and the name has been universally adopted with the "etymologically impossible" spelling changed to *mesochoreum*. The quoted words are my own; but I later discovered that *messa-* is actually to be found in classical Greek as a variant of *meso-*. Etymology is dangerous

for the amateur, and it is manifestly wise to maintain the original spelling whenever doubt exists. A particularly interesting problem is that of *Amaranthus*. This was derived by Linnaeus from maraino *(μαραίνω)*, to quench, wither, etc. and anthos *(ἄνθος)*, flower, with the alpha privative: an unwithering flower. This questionable etymology, which omits part of the stem of the verb, was, as Sprague has shown (Kew Bull. 1928 : 287) taken from Tournefort; Linnaeus deliberately rejected the spelling *Amarantus* based more securely on the adjective *(ἀμάραντος)* which means "unwithering." Curiously enough, there may have been a much better reason why some of the ancients used the spelling *Amaranthus:* the passive participle of the verb ("withered") is marantheis *(μαρανθείς)*.

In any case, when we do "correct" the original spelling as having contained an orthographic or typographic error, no change in concept or type is involved; the name is still the name of the original author, and the date of publication is unchanged. This is clearly the intent of the *Code;* see the examples of errors on p. 82. Article 56 is also relevant; it provides that a change in the diagnosis or circumscription of a taxon does not warrant a change in the author cited; still less should a change in the spelling of the name warrant such a change. If we change *Lycopersicon* to *Lycopersicum*, as we are invited to do in a proposal for conservation (Syn. Prop. 231), there is no justification for changing the authority for the name from Miller to Hill; it is permissible to write the name, if we so decide, *Lycopersicum* Mill. corr. Hill; but it remains Miller's genus.

Conservation, in fact, can scarcely be invoked for the correction of orthographic or typographic errors, for such action is not contrary to the rules but in accord with them. There is no provision in the Code for action on such corrections by a congress or by a committee. Any one may make such a change, if he has reason for it. It is, of course, desirable that the change, with the reasons for it, be published in a place as accessible as possible to all botanists; perhaps references to such changes should be assembled in an appendix to the *Code.*

Conservation can be effected only after submission to special committees appointed by an international congress (and presumably by action of such a congress, though the Code does not make this clear). By conservation we provide "lists of names which must be retained as exceptions" (Art. 24). Most conserved names are exceptions to the principle of priority; but there is no reason why a name should not be conserved in a variant spelling as an exception to Article 82. *Buginvillaea* was an attempt to latinize a French personal name; no matter whether we like the result or not, we cannot ascribe its peculiarities to error and so "correct" it, and we ought to have always used the name in this form. The variant *Bougainvillea*, however, became so general and was so much more acceptable that the name has been conserved with this spelling. Even this action did not alter the concept or the type (if any) of the original author; it should be cited as "*Bougainvillea* Comm. (as *Buginvillaea*)"; and the date of publication remains 1789, when Jussieu published Commerson's name.*

The problem of *Xanthoxylum* vs. *Zanthoxylum* is more complicated. Linnaeus spelled it with an initial Z, and probably deliberately. He took the name from Plukenet without change, and maintained it in this form in his later writings. He was not ignorant of the etymology, for he derived *Xanthium* from the same Greek word. Miller, however, "corrected" the spelling to *Xanthoxylum;* and, unfortunately, conservation of Miller's type is necessary to maintain the name in its current application (which excludes Linnaeus' species). Must we also change

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* The bibliographically minded may, of course, expand this citation to "*Bougainvillea* Comm. ex Juss. (as *Buginvillaea*) corr. Spach."

the original spelling? It is evident that Miller did not intend to propose a new name; he thought that he was adopting the Linnaean genus; and by many authors up to recent times both concepts have been retained in one genus. In my opinion the spelling of a name is distinct from its typification, and I should not interpret the footnote on p. 82 of the *Code* ("In some cases an altered spelling of a generic name is conserved") as meaning that when the concept is changed so as to exclude the original type the spelling of the later author *must* be adopted. I should recommend conservation of "*Zanthoxylum* Mill. (as *Xanthoxylum*)." The point is, however, debatable.

To summarize the above remarks, the following points may be emphasized: (1) the original spelling of a name should be maintained in the absence of very clear evidence of error; (2) action by a committee or a congress is not, according to present rules, necessary for the correction of an error in spelling; (3) an altered spelling may be conserved if it may not legitimately be corrected; (4) an orthographic change does not warrant a change in authority nor in the date of publication.

REMARQUES SUR QUELQUES PROPOSITIONS POUR LE CONGRÈS DE PARIS

par

M. Pichon (Paris)

Proposition n. 40

Nous avons proposé (Proposition no. 12; Taxon 2 (5) : 110. juillet 1953) l'établissement d'un *Article* 78*bis*, rendant illégitime le nom d'une section formé par adjonction du préfixe *eu-* au nom d'un genre quand la section ainsi nommée ne contient pas le type du genre.

M. Sprague (Proposition no. 40; Taxon 2 (7) : 177. octobre 1953) veut rendre illégitimes tous les noms de sections en *eu-*, même lorsque ces sections contiennent le type de leur genre. Il n'y a pas de raison, dit-il, de traiter les noms de sections autrement que les noms de sous-genres.

Cette proposition nous paraît aller trop loin. En effet:

1. Elle amènerait à changer le nom de toutes les sections en *eu-*, plusieurs milliers sans doute, en contradiction avec l'article 4 des Règles qui dit: "L'essentiel est: 1) d'obtenir la fixité des noms".

2. Suivant l'Article 32, "le sous-genre contenant l'espéce-type du nom de genre doit porter ce dernier nom tel quel". Mais rien ne stipule qu'il doit en être de même pour la section contenant l'espèce-type du nom de genre. Au contraire, c'est ici la priorité qui joue. Dans le genre *Landolphia* P.B., la section qui contient l'espèce-type s'appelle actuellement "sect. *Eulandolphia* Pierre". Si la proposition no. 40 était adoptée, cette section devrait être appelée "sect. *Mesandroecia* Hall. f.". Rien n'indiquerait plus que c'est la section-type du genre, et ce serait regrettable.

M. Sprague estime que le paragraphe (3) de notre proposition no. 12 est inutile. Il nous paraît au contraire essentiel. Le type du genre *Guerkea* K.Sch., *G. floribunda* K.Sch., est, pour Stapf, un *Baissea* de la section *Eu-Baissea* Stapf. D'autre part, Stapf a établi une section *Guerkea* pour *Baissea gracillima* Hua. Si un Botaniste X fondait un jour une section sur *Baissea floribunda* (K.Sch.) Stapf, il devrait, si le paragraphe (3) n'était pas adopté, l'appeler "sect. *Guerkea* Stapf, (quoad basinymum, non quoad species)". Il y aurait ainsi deux sections *Guerkea:* 1. Sect. *Guerkea* Stapf sensu Stapf; 2. Sect. *Guerkea* Stapf sensu X. C'est precisément une telle possibilité de confusion qu'il faut éviter, en rejetant définitivement le nom de "sect. *Guerkea*", quelles que soient les espèces auxquelles il est appliqué.

Propositions n. 44 & 77

Deux propositions ont été publiées, l'une par Raizada (Taxon 2 : 185. 1953), l'autre par Harold St John (Taxon 3 : 8. 1954), demandant la suppression du dernier alinéa de *l'Article 42*. Ces auteurs estiment que Bentham et Hooker, ayant écrit que l'espèce *Cnidium peucedanoides* H.B.K. appartient

au genre *Eulophus*, doivent être considérés comme ayant créé la combinaison *Eulophus peucedanoides*.

Il est dangereux de faire dire aux auteurs ce qu'ils n'ont pas dit. En l'occurrence, Bentham et Hooker désignent leur espèce par les deux binomes *Smyrnium lineare* Benth. et *Cnidium peucedanoides* H.B.K. Pourquoi leur attribuer la combinaison *Eulophus peucedanoides* plutôt qu'une combinaison *Eulophus linearis*?

Ailleurs, Bentham et Hooker écrivent, à la suite de la description du genre *Microchites* (Apocynaceae). "Species ad 4,.... inclusa *Ecdysanthera Schrieckii* Muell. Arg. ....". Rien ne prouve ici que Bentham et Hooker considéraient l'espèce *Schrieckii* comme une bonne espèce de *Microchites*. Une révision du genre *Microchites* les aurait peut-être amenés à faire tomber *Ecdysanthera Schrieckii* en synonymie d'une espèce de *Microchites* déjà existante. C'est, semble-t-il, par prudence qu'ils n'ont pas créé la combinaison, laissant à un monographe ultérieur le soin d'examiner s'il y avait lieu de la créer, et, dans l'affirmative, le soin de la créer Cette prudence était justifiée. En effet, la combinaison *Microchites Schrieckii* faite plus tard par Rolfe s'est trouvée être inutile, car *Ecdysanthera Schrieckii* Muell. Arg. est synonyme *d'Otopetalum micranthum* Miq., dont le nom est devenu *Microchites micrantha* (Miq.) Hall. f.

Il est donc préférable de laisser l'Article 42 tel qu'il est.

Proposition n. 56

M. Janchen (Taxon 2 (8) : 208. novembre 1953) propose que soit conservé *Elisma* Buchenau (1869) et rejeté *Luronium* Raf. (1840).

Deux arguments paraissent militer contre cette proposition:

1. Il y a danger de confusion entre *Elisma* et *Alisma*, en raison de la ressemblance des deux noms.

2. Il existe une sous-tribu des *Luroniinae* (Not. Syst. 12 : 181. 1946), fondée sur *Luronium*. Il n'existe aucun nom de subdivision de famille fondé sur *Elisma*.

PLEASE LEAVE ARTICLE 32 ALONE!

by

W. T. Stearn

As change upon change in plant names comes to public notice, so the opinion grows among botanists and others who are not nomenclaturists that the main function if not the intent of the International Rules of Botanical Nomenclature is to provide opportunity and excuse for changes in botanical nomenclature under the pretext of thereby reaching stability. In justification for this opinion it has to be admitted that almost every International Botanical Congress approves the introduction into the Rules (now the *International Code*) of provisions leading to such changes. The Rapporteur général is accordingly to be congratulated on advising against the acceptance of certain proposals in the *Recueil synoptique des Propositions* for the Paris Congress on the grounds that he finds them "unnecessary", "extremely dangerous", "apt to cause misunderstandings", leading "to numerous changes", etc. From the taxonomist's viewpoint it is regrettable that the Rapporteur did not likewise oppose all the proposals (Prop. A—G, not simply A and D) set out on p. 51 for the alteration of Article 32, the same damning expressions being equally applicable to them. There is nothing new in these proposals, which were discussed at Stockholm in dealing with Article 26bis. From this discussion resulted the present Article 32, which, *with its application deliberately restricted to subgenera*, was carried by a large majority. That article reads: — "The subgenus containing the type species of a generic name must bear that name unaltered". This means that the subgenus containing the type species of the accepted generic name of the genus to which it belongs must bear that name unaltered, notwithstanding the existence of an earlier and widely used subgeneric name. Extensions of this method of naming to other generic subdivisions, i.e. to sections, subsections, series and subseries, would create difficulties and inconvenience not yet apparent to those, who on grounds of *a priori* logic rather than experience in the classification of large genera, now propose the alteration of Article 32. They should therefore be opposed. Of Article 32 itself the mycologist Rolf Singer has remarked (*Lilloa* 22 : 750): — "it is a bad rule because the Congress has taken upon

itself to act on this proposal before the question of the lectotype list was settled and because it is in contradiction with Art. 3 and 4 (1). But since it has been accepted we shall probably have to bear the consequences." With this conclusion I agree. The present Article 32 should be accepted (though made clearer in wording) but it should certainly not be extended. The *International Code* is intended to be an aid for users of plant-names, not a rod of perpetual castigation; it even states (Art. 3) that its provisions "should be founded on considerations sufficiently clear and forcible for everyone to comprehend and be disposed to accept". The proposals to alter Article 32 are not founded on such considerations although they may well appeal strongly to those whom they will inconvenience least!

The objections to these drastic proposals are several and important. Space does not permit more than an indication of them here, but the whole matter should be thoroughly discussed in Paris. Unfortunately, as experience with Article 35 has shown, the difficulties inherent in changes of nomenclatural procedure have an unpleasant habit of only becoming evident after people have left the Congress room believing everything logically and satisfactorily settled.

Quite apart from the conflict of proposals B, E and G with the long established Article 31, which states that "for subsections and lower subdivisions the epithets are preferably *plural adjectives*", whereas the name of a genus is, as stated in Article 30, "a *substantive*, or an adjective used as a substantive, *in the singular* number", proposals B, C, E and G will lead to a vast number of name changes involving breaks in the continuity of botanical literature. They will thus render more difficult the finding of definitions. Nomenclaturists are apt to forget that in taxonomic work (e.g. the identification of material, the use and making of keys, definitions and descriptions) the circumscription of a group is as important as its type, and this circumscription can only be ascertained by research or the consultation of descriptive works to which the names in use provide the guides. There is no intrinsic objection to a subgeneric or sectional epithet (as distinct from the epithet of a subsection, series or subseries) being the same as the generic name; proposal A should therefore be rejected along with the other proposals. The objection is to changing thousands of names of sections etc. well established in major systematic works of everyday use by working taxonomists; deliberately to make the nomenclature of such works obsolete is sheer folly, comparable to that of the man up a tree who sawed off the branch he was sitting on. It just happens that the repetition of the generic name as a subdivisional name has never been widely employed. Stephan Endlicher did it more than most authors. Taking a hundred consecutive genera divided into sections in Endlicher's *Genera Plantarum* (1836—41) I find sixteen examples of the sectional name repeating the generic name (e.g. *Orites* sect. *Orites*), 22 examples of *Eu-* added as a prefix to the generic name (e.g. *Lomatia* sect. *Eulomatia*) and 62 examples of the section containing what may be the generitype named in another way (e.g. *Aristolochia* sect. *Clematitis*). Later the prefix *Eu-* became more popular and repetition of the generic name disappeared. In a hundred consecutive genera sectionally divided in Bentham and Hooker's *Genera Plantarum* (1862—83) I find only 4 examples of the generic name repeated, 53 examples of the prefix *Eu-*, 43 examples of other names. In a hundred such consecutive genera in Engler and Prantl's *Pflanzenfamilien* (1887—98) I find no example of the generic name repeated, 55 examples of the prefix *Eu-*, 45 examples of other names. In Rehder's *Manual of Cultivated Trees and Shrubs* 2nd. ed. (1940), during the preparation of which Rehder devoted much careful bibliographical and taxonomic research to ascertaining the correct sectional names under the International Rules then prevailing, I find 1 example of the generic name repeated, 35 examples with the prefix *Eu-*, 22 examples of other names. It is important to note that these names were associated at their original publication with definitions which form an important element in the framework of classification within genera which we inherit, and only by means of these names can they be found and cited. Leaving aside the names prefixed by *Eu-*, which can be dealt with, if desired, in another Article (c.f. 78bis A) while Article 32 remains unchanged, acceptance of proposals B, C, E, F and G means discarding some 50% of the sectional names in use for the division containing the generitype as well as all subsectional and series names; nevertheless we shall still have to use these discarded names as synonyms to indicate the circumscription! The new names by themselves will long be meaningless. The exact systematic position of a new species

described as belonging to *Rhododendron* subg. *Rhododendron* sect. *Rhododendron* subsect. *Rhododendron* will only become evident when this nomenclature is translated back into the naturally quite different nomenclature employed in Sleumer's "*System der Gattung Rhododendron*" (Engler, *Bot. Jahrb.* 74 : 511-553; 1949). Even so careful and recent a classification as Lawrence's work on Iris (*Gentes Herbarum* 8 : 346-371; 1953) loses utility when the name *Iris* subgen. *Iris* sect. *Iris* subsect. *Pogoniris* series *Iris* is made obligatory. The substitution of such an indirect time-consuming approach to information for the direct approach can benefit no-one.

Moreover if proposals B, C, E, F and G are accepted, it will be a long time before they can be consistently and accurately applied, owing to difficulties of typification, which in some groups (c.f. Corner in *Nature* 168 : 1031; 1951) are immense. Applied quickly, in order to adhere to the letter of the *International Code*, they will inevitably lead to hasty typification or typification based on inadequate information, to subsequent controversy and to confusing shifts in the application of names. Many genera have from the start of their nomenclature included a diversity of species; the selection of a generitype demands a knowledge of all these original species and of all the relevant literature. Moreover there are genera at whose original publication no species was mentioned. The selection of a type is essentially a task for a monographer of experience. As Article 32 stands at present there is no urgency over the selection of types unless subgenera are recognised and as a subgenus can include several sections etc. the chance of doing harm by choosing an inappropriate generitype is less than with lower subdivisions, it being for example of no consequence as regards subgenera whether *Anemone coronaria* or *A. nemorosa* be selected as the generitype of *Anemone* although they belong to different sections, but the proposed alterations mean that for every genus in which subdivisions are recognised a type must be immediately selected to make its subdivisional nomenclature conform to the new rule.... This will often have to be done by people preparing regional treatments and lacking adequate facilities. The lectotypes for the genera of Linnaeus's *Species Plantarum* were chosen by two botanists of experience with full library facilities; nevertheless even they selected a number of species which have proved unacceptable because they lacked a knowledge of all the species concerned. Little but harm can result from the hasty typicifation these dangerous proposals will encourage. In mycology the proposed new rule will be especially productive of confusion and distress. It will be better not to have the rule at all than lower the prestige of the *International Code* by the introduction of a rule which conscientious workers will often be obliged to ignore.

The above remarks do not exhaust the objections to the proposed alterations to Article 32. They are intended to indicate that these alterations should not be uncritically accepted. These proposals do *not* "expriment la nécessité de suivre la méthode des types dans toute la nomenclature botanique". They simply create difficulties and solve none. The type-method is a device for supplying fixed points of reference to which names are attached and which must be kept within the circumscription of given groups. It is completely in accordance with the type-method that groups shall be typified on their own hierarchic levels by reference to immediate facts. The chaos which can result from the extension of Article 32 to all subdivisions containing the generitype and then — by some bright boy out to show the world how badly these things were done by such industrious old fools as the De Candolles, Asa Gray, Bentham, Engler and others — of the same principle to subdivisions of all subgenera and then of sections, which we may expect at later Congresses if these proposals are accepted, will do nothing but harm. Experience gained in dealing with subdivisional names within a considerable number of genera leads to the conclusion that *the Paris Congress will best serve taxonomy by having the good sense to leave Article 32 as it stands and to reject all proposals for its suppression and all for its extension.* Recommendation 68B should likewise be left undisturbed.

MISCELLANEOUS NOMENCLATURAL NOTES

by

A. A. Bullock (Kew)

1. Robert Brown's paper "*On the Asclepiadaceae*". Mr D. P. Rogers's argument (Taxon, 2 : 181-2) concerning the date of publication of Robert Brown's paper on the *Asclepiadaceae* is clearly a reply to R. de Litardière's request (Taxon, 2 : 34) for guidance on the matter.

Whilst admitting the cogency of Mr Rogers's analysis of the first volume of the Memoirs of the Wernerian Society, it is evident that he has overlooked the fact that Brown quoted his paper, with volume pagination, in his *Prodromus* published in 1810. I drew attention to this in a note in the Kew Bulletin, 1953 : 64-5 and concluded that for practical purposes it would be convenient to adopt the date 1809 for Brown's paper, since this date has been used in the *Index Kewensis* and indeed in most of the relevant literature. The existence of the undated, separately paginated, reprint must not be ignored (See Art. 39, Examples).

2. Conservation of generic names. In Kew Bulletin 1953 : 65 I recorded my acceptance of the spelling *Huernia* for the generic name commemorating J. Heurnius, in accordance with Sprague's arguments concerning this and other of Robert Brown's generic names (Kew Bull. 1929 : 242). This name appears, however, among others proposed for conservation by E. Janchen in Appendix V B of the International Code (1952), with the "corrected" spelling *Heurnia*. I wish to record my objection to the conservation of this name, and to make the general observation that proposals for conservation should not be made by botanists who are not actively engaged in work on the taxonomy of the genera concerned. In this connection I should like to draw particular attention to the remarks on this subject by Dr Sprague and Dr Fosberg (Taxon, 1 : 14-15).

3. Rejection of implied new combinations. A general point (also relevant to Robert Brown's paper on the *Asclepiadaceae*), concerns the plea by M. B. Raizada (Taxon, 2 : 185-7) for the admission of implied new combinations. Article 42 may be imperfect, and H. St John (Taxon, 3 : 8) has shown that some of the examples quoted are bad ones, but the effect of invalidating implied new combinations is a good one. It should not be annulled. I can assure Mr Raizada that the compilers of the *Index Kewensis* are very patient indeed and Article 42 has eased their task considerably. Would Mr Raizada ask that they be obliged to read in detail to discover whether an author in mentioning, for instance, *Asclepias undulata*, really meant one to read *Xysmalobium undulatum*? (See Kew Bull. 1953 : 64). By comparison, the task of correcting the entries wrongly attributed to authors who did not in fact publish the names concerned is not too difficult or extensive.

It must be remembered that although the great majority of the entries in the *Index Kewensis* are correct, they cannot be accepted for nomenclatural purposes without checking against the publications cited, any more than the taxonomic opinions expressed in the original volumes and the first supplement can be accepted without question. As an example, *Index Kewenses* cites *Albizzia isenbergiana* Benth. as a synonym of *A. julibrissin* (Willd.) Durazz. But Bentham did not in fact publish the combination *Albizzia isenbergiana*, — he merely cited the invalidly published name *Acacia isenbergiana* Schimp. ex A. Rich. in a list of species to be referred to the genus *Albizzia*. Later, he published his opinion that *Acacia isenbergiana* (i.e. *Inga isenbergiana* A. Rich.) is a synonym of *Albizzia julibrissin*. (See Hook. Lond. Journ. Bot. 1 : 527, 1841, and 3 : 91, 1844).

4. Conservation of generic names and the year 1890. Mr C. V. Morton's proposal no. 89 (Taxon, 3 : 22) seems to give undue weight to an unfortunate phrase in Article 24. It would surely be better to delete the words "up to the year 1890". Experience has shown that neither 1890 nor 1907 has any significance whatever in this matter, which is purely one of convenience.

5. Names of infraspecific taxa. There can be little doubt that proposal no. 90 by H. Hara (Taxon, 3 : 23) will be rejected by the Paris Congress. The application of the proposal depends entirely on matters of opinion and the modification of the rules envisaged will do nothing to resolve the difficulties quoted. Who, for instance, is to decide what is a "slight or unessential"

modification? This departs from the realm of nomenclature into genetics and evolutionary theory. The proposal is completely opposed to the rules expressed in Articles 61 and 72 and the arguments brought forward do nothing to show that the consequential modifications of those and other rules would be desirable.

In the examples quoted the correct procedure would be to reject any name the application of which is shown to be indeterminable. The difficulties encountered because of the lack of an index of infraspecific names are, although serious, not the concern of the Code, and the proposal would not, as Dr Hara seems to think, ease those difficulties.

6. Names of supraspecific taxa. R. H. Lamberton's proposal no. 86 (Taxon, 3 : 19) and his proposal no. 152 (Taxon, 3 : 64) are unnecessary and show some misunderstanding. Clapham, Tutin and Warburg (Fl. Brit. Isles) did not make the combination *Alchemilla vulgaris* and they certainly had no intention of making a taxon of higher rank than species when they added the abbreviation "agg.". One may object to the form of presentation, but the nomenclature is sound. All that the authors in fact say is that if species 3-14 (of *Alchemilla)* are united into one taxon, the (aggregate) species so formed must be called *A. vulgaris.*

Mr Lamberton's second example (Proposal no. 86) is equally irrelevant and one might ask why he has selected *Gigantabies taxifolia* for special consideration? All the binary names in J. Nelson (Senilis), *Pinaceae* (1866) are illegitimate under Articles 12-15, since he subdivides the *Pinaceae* (or Coniferae) in a manner which excludes (among others) the category "genus" and further makes recognition of that category impossible; in other words, he does not use the nomenclature of the Code, although he does use binary names for one of his categories of taxa.

7. Article 34. The first two paragraphs of this article are wrongly placed in the section entitled "Names of taxa below the rank of species", since they apply to a much wider range of categories, up to *Order.* The first paragraph reads, "For nomenclatural purposes, a species or any taxon below the rank of a species is regarded as the sum of its lower taxa, if any". The last two words are in any case meaningless, but also any taxon is, by definition, the sum of its lower taxa, for all purposes, not merely nomenclatural. This paragraph, suitably reworded, would be better placed following the last paragraph of Article 8.

The second paragraph conflicts to some extent with Articles 42-54, concerning valid publication. It reads, "The description of a subordinate taxon which does not include the nomenclatural type of the higher taxon automatically creates a second subordinated taxon of the same rank which has as its nomenclatural type the type of the higher taxon." In this paragraph there is no direct reference to which categories are to be included in the word "taxon" and in spite of the sectional heading it can and does apply to all categories up to the rank of Order. The date of publication of the name of the "type" subordinate taxon is clearly indicated as the date of publication of the first "non-typical" subordinate taxon. This is also dealt with to some extent in M. S. Doty's proposal to amend Article 32 (Taxon, 3 : 16).

The valid publication of the name of a taxon of any category does not require the citation of either a type or of any of the lower categories included in it. But the Code and the type method which it embodies demand (See Art. 18-21) that all such taxa must have a type and it therefore follows that the name of the type subordinate taxa are automatically created when that of the higher taxon is published.

It is admitted that the unfortunate exclusion of tautonymic specific epithets (Articles 65, 79) prevents the application of this principle when a genus is described without the citation of species; but there is no bar, so far as I can see, to regarding *Diplacorchis* Schltr. Sect. *Diplacorchis* as having been published by Schlechter in Beih. Bot. Centralbl. 38 (2) : 127 (1921), and not by Summerhayes, who first divided *Diplacorchis* into sections by the description of Sect. *Brachycorythoides* Summerh. in Kew Bull. 1931 : 579 (1931) and separated it from the "type" section.

8. Article 35. In the same way as in para. 7 above, the application of the provisions of this article cover a much wider range than is indicated in the article, but the particular point I wish to make is in connection with the last sentence, "This epithet can no longer be used when that of the next higher taxon is changed". If the change is on taxonomic grounds only then the epithet must stand under the normal rules governing legitimacy.

It is in such instances that the date of publication of "type" subordinate taxa becomes significant and the argument of para. 7 above applies.

I cannot support de Litardière's argument (Taxon, 3 : 41) for the suppression of this article. The examples cited by him involve the classification of the taxa concerned, but their nomenclature does not, so far as I can see, involve any serious difficulty. Any author who uses a name such as *Festuca rubra* L. subsp. *rubra* var. *rubra* subvar. *rubra* (or the corresponding ternary name indicated in Article 34) is saying, in effect, "I have identified the subvarietal taxon which includes the type of *Festuca rubra* L.". If such typification is impossible, or the author is in error, the subvarietal name amounts to a misidentification. But this is not a fault of the Code.

9. The Cape Belladonna Lily. Dr Dyer's excellent review of the opinions expressed on this topic (Taxon, 3 : 72-74) is a timely plea for reasonable action. My colleague Mr J. R. Sealy was, perhaps, in a better position geographically than his somewhat vituperative American critics to assess the available evidence and this fact alone, — apart from his obviously careful and unbiased presentation, — should have given them cause to reconsider their earlier opinions. I am convinced that Mr Sealy's conclusions were correct.

The special case, as is usual, calls to mind others in which differences of nomenclatural opinion have led to confusion, and this is nowhere more apparent than in *Mesembryanthemum* L. for which no fewer than three species, each representing a distinct genus, have been proposed as lectotype and each has gained a number of adherents. A review of this controversy was given by Rothmaler in Notizbl. Bot. Gart. Berlin, 15 : 410-414: 1941, who concluded that N. E. Brown should be supported.

The citation of type species in the list of *nomina conservanda* gives a means of settling such questions by international agreement. At present the list is limited to the conservation of generic names against earlier synonyms or homonyms; it could be extended to the conservation of names in a particular sense.

10. New Article 70bis. Mr L. Benson's proposal no. 142 (Taxon, 3 : 60) is a further illustration of confusion between nomenclature and taxonomy. The facts of inconsistency and apparent carelessness of authors in their use of the categories "variety" and "subspecies" do not constitute reasons for continuing or encouraging such inconsistencies and carelessness. Most modern taxonomists have a fairly clear idea of their own interpretation of the limits of the various categories of taxa and there is a most remarkable degree of unanimity amongst them. The introduction of the idea that it does not matter whether an author calls a taxon "variety" or "subspecies" or indeed any other infraspecific category — particularly into a Code which aims at precision — would be definitely retrograde.

11. Recommendation 82g. The arguments for and against decapitalization of specific epithets have been repeated *ad nauseam*. But taxonomic nomenclature is a means to an end, not an end in itself or a field to be given up to classicists, historians and others who wish to display their erudition to the discomfiture of users of plant names.

For my own part, I am very pleased to be relieved of the extra burden of being obliged to check the origin of doubtful epithets to decide whether I should write them with a capital or a lower case letter and would welcome the incorporation of decapitalization of specific and infraspecific epithets into Article 82 with the force of a rule. The arguments supporting Proposal no. 154 (Taxon, 3 : 64) by Gleason and Rogers seem to be merely facetious. I have never heard any suggestion of decapitalizing unitary names; by definition they are substantives. Specific epithets, however, even if they happen to be substantives, are in effect adjectival and the absence of an initial capital letter tends to emphasize this fact (See also L. Benson, Proposal no. 2, in Taxon, 1 : 113).

12. Articles 31 and 32. H. St John has made useful and necessary proposals for the amendment of these articles in Taxon, 3 : 7, but further amendment seems desirable. Article 31, para. 3 suggests that the epithets of section and lower infrageneric categories should be plural adjectives, but Article 32 as amended by St John insists that all such epithets must be substantives, at least for that taxon which includes the type. These two dicta taken together are at variance with Recommendation 32A which points out that

a mixture of substantives and adjectives for infrageneric epithets in the same rank should be avoided. This is perhaps a point which the editorial committee might bear in mind.

13. Article 39. The amendment proposed by H. St John to define more accurately the field of literature in which valid publication of new names may take place will find considerable favour with the compilers of the *Index Kewensis*. It should, I think, be the business of the Congress to consider whether it is practicable to restrict valid publication to journals devoted to taxonomic botany, on a national or even an international scale. St John's amendment is an improvement on the article as at present worded, but in answer to his question — I would exclude the publications he mentions, together with ecological and agricultural journals, the journals published by the numerous specialist horticultural societies and the vast majority of local natural history society journals. All of these are to a greater or less extent scientific journals, some of them exclusively so; but their business is not primarily taxonomic botany.

This matter is also raised by L. C. Wheeler in his proposal no. 140 (Taxon, 3 : 58). He points out the difficulty of defining tradesmen's catalogues and newspapers, but then makes the startling assertion, — "Restriction of avenues of publication is the first step toward the creation of more Rafinesques and Marcus E. Joneses." This seems to be a *non sequitur*, as indeed also is his next paragraph which states that the necessity for providing a Latin diagnosis is a sound preventive. No Latin diagnosis is required for new names which can be referred to previously published descriptions. In this connection I would like to mention that the editor of the Journal of Ecology does not permit publication of new names in his journal, nor do the editors of the Flora of Tropical East Africa and the new edition of the Flora of West Tropical Africa.

14. Article 75. I am in full agreement with H. St John's vigorous attack on this article in Taxon, 3 : 10. The provision for the rejection of *nomina confusa* is being taken care of by a modification of the proposal for *nomina rejicienda* given in Taxon 1 : 78-80 put forward by some members of the Kew staff to the Geneva Symposium (Jan. 25-30, 1954). The necessity for this provision is underlined by St John's phrase, "The name of any taxon that is capable of typification...."; there are so very many names that are doubtful or incapable of typification.

15. Article 81. With apologies to L. C. Wheeler (Taxon, 3 : 58).

Verb. nov. should follow *typonymous*
Wheeler, — there's nothing synonymous
Its euphoniosity
Reduces verbosity, —
But it isn't a word — it's *basonymous*.

FUNGAL SYMBIONTS OF LICHENS

by

Rolf Santesson (Uppsala)

Remarks on Proposal no. 46: R. Ciferri and R. Tomaselli, The taxonomy and nomenclature of the fungal symbionts of Lichens. — Taxon 2 : 194, 1953.

In Art. 76 of the I.C.B.N. it is stated: "*For nomenclatural purposes names* given to lichens shall be considered as applying to their fungal components — —."

This does not mean that "lichens are to be considered only with regard to the fungus, leaving the lichenic complex out of the picture (even from a biological point of view", nor that "a lichen is considered as a fungal parasite of an alga" (Ciferri & Tomaselli, loc. cit.).

* * *

Following the scheme suggested by Thomas (1939), Ciferri & Tomaselli propose the establishment of two different classifications and two nomenclatural systems, one for the lichens and one for the fungal components of the lichens.

This means an addition of about 20.000 new names to botanical nomenclature. Is this drastic step really necessary and can it be scientifically defended?

As generally admitted, also by Ciferri & Tomaselli, lichens are composite organisms consisting of fungi and algae. It has been clearly proved that neither the lichen-fungi nor the lichen-algae form inter se coherent taxonomic groups, but that they are related (or belong) to different groups of non-lichenized fungi and algae. Instead, lichens form a biological group. This group is not sharply circumscribed, and in many cases it

is difficult to establish whether or not an "organism" should be regarded as a lichen. There exist in fact fungal species which are sometimes clearly lichenized, and sometimes living without algae. There are lichens which during part of their life-cycles live as parasymbionts. In many other cases it is difficult to decide whether a fungus should be regarded as lichenized or as a true parasite on algae.

Lichens do not form the only example of composite organisms which seem to form "a new unitary organism" ("ein neues einheitliches Wesen", Mattick in Ber. Deutsch. Bot. Ges. 64 : 95, 1952). Other examples are provided by the "Endocyanosen", the "Syncyanosen" (Pascher 1939 and 1914), by various higher plants with their symbiotic bacteria and Actinomycetes, by the mycorrhizas, and by the numerous animals (corals, Ascidiae, etc.) with their symbiotic algae. Fortunately, no attempts have been made to establish for these organisms two different nomenclatural systems similar to those now proposed by Ciferri & Tomaselli.

It must be emphasized that the double nomenclatural system proposed does not mean two taxonomical systems, but one taxonomical and one biological. (This fact was clearly stated by Thomas). The proposal means that the lichen names should be used only in the biological system and not as taxonomical names. The extensive consequences for the whole botanical nomenclature by an acceptance of Ciferri & Tomaselli's proposal must be carefully considered by all botanists.

Ciferri & Tomaselli gave "two very important arguments" which should justify their two classifications and two nomenclatural systems:

1. "The fungal symbiont, cultivated in the laboratory, does not fructify, —" Does this prove more than that our present laboratory technique is imperfect?

2. "No one has been able to reproduce indubitably the lichenic symbiosis under experimental laboratory conditions. — —" The meaning of this argument is difficult to understand. Thomas's (1939) successful synthesizing of *Cladonia pyxidata*, e.g., cannot be unknown to Ciferri & Tomaselli. Could they perhaps mean that in the laboratory nobody has been able to make a lichen from a fungus which is not lichenized in nature? Is not that demanding too much of the laboratory botanists?

The second sentence under point 2. runs as follows: "The fungal component of the lichen symbiosis, whatever its origin may be, has moved away from the actual representatives of the non-symbiotic Ascomycetes to such an extent that now it can no more be included in the mycological system of the free fungi." This is a clearly incorrect statement.

* * *

As arguments for their proposal, Ciferri & Tomaselli list a number of "fungal genera" which are said to be "common to" one or more morphologically very different "lichen-genera", and some "lichen-genera" which are said to include two or more different "fungal genera".

Some of the lichen-genera mentioned in their proposal are genera based exclusively on the occurrence of different algae in their thalli. Fortunately, nobody has got the idea of basing, for instance, genera of phanerogams exclusively on the occurrence of different mycorrhizal fungi in their roots, or genera of the Uredinales on characters derived from the host plants. Some of the other lichen-genera mentioned are distinguished because their species are real lichens or parasymbionts. This division is based on a purely biological character. It is true that a number of lichenologists still accept such genera and even the "gonidial" lichen-genera, but the opposition against these views is very strong.

Most of the cases, where different "lichen-genera" are said to have representatives of the same "fungal genera" as a component, are more complicated. They are so extremely remarkable indeed that a discussion seems impossible before Ciferri & Tomaselli have published a more detailed report of their investigations. For all lichenologists it is most sensational to learn, for instance, that the lichen-fungi of *Usnea* and *Lichina* would belong to the same genus, similarly those of *Evernia* and *Parmeliella*, and those of *Ionaspis* and *Parmeliopsis*. It is also extremely remarkable to learn that the fungal components of *Cladonia rangiferina* and *Cl. silvatica* should represent different fungal genera.

* * *

As a matter of fact, a reader of the proposal made by Ciferri & Tomaselli, and of their two cited papers from 1952, cannot, indeed, free himself from the impression that they intend to make fun of lichenology.

NOMINA SPECIFICA REJICIENDA

by

Kew Botanists

We wish to suggest the following four amendments to the proposal put forward in 'Taxon' 1 p. 78.

A. to be inserted at the end of the article:

note 5. The list of *nomina specifica rejicienda* shall, in the first place, include names of *Spermatophyta* only. The machinery may be extended to cover other groups if and when a majority of botanists working on such groups shall so decide at a future international botanical congress.

Reasons for A.

a) As the majority of well known species are *Spermatophytes,* the article is most needed for this group.

b) Special subcommittees would probably be needed for other groups.

c) Those botanists working on groups other than the *Spermatophyta,* who are opposed to the article may drop their opposition when they see that it does not affect them (four of the eight Kew botanists who opposed the proposal on January 13th are specialists on the *Cryptogams*).

B. to be inserted before note 1.

Where a name proposed for rejection has been used in a work published during the last 60 years the proposal for its rejection must be published in 'Taxon' at least six months before its final rejection.

Reasons for B.

To give those concerned an opportunity for support or opposition. Otherwise it might happen that names would be rejected without some of the relevant facts being considered.

C. to replace note 1.

Names recently brought into use, even if they invalidate well known names, may not be made into *nomina rejicienda* on that account if they have been adopted in an important work likely to be used for a considerable period by non-taxonomists as well as taxonomists, such as a flora, a manual or a monograph. Thus *Quercus petraea* could well have been made a *nomen rejiciendum* when it was first brought out of obscurity to replace *Q. sessiliflora,* but it cannot be rejected now that it has been used in, for instance, Clapham, Tutin and Warburg's 'Flora of the British Isles'.

Reason for C.

The statements in point 4 of the preamble and note 1 of the article that the article 'cannot be used retroactively' seem to be false, since, unless retro-active use is permitted it would be impossible to reject a name once it had been published. The important criteria in deciding whether a name may be killed or not seem to be (1) whether it has been published in a work only likely to be used by taxonomists, who may be expected to pay attention to its subsequent appearance in a list of *nomina specifica rejicienda,* or in a work more widely read. (2) If the latter is the case; is the work ephemeral, likely to be soon forgotten, or solid, likely to be used for some time?

D. to replace the second sentence of the proposed article by the following:

The object of the list of *nomina specifica rejicienda* is to further the attainment of stability and unambiguity in nomenclature, especially in that of familiar species of wide distribution and species of special horticultural, economic or other importance.

Reason no. 1 for rejecting a name should be altered to

An overlooked or little used name which is an earlier synonym of the commonly used name of a species which is familiar and widespread, or of special horticultural, economic or other importance.

Reason for D.

The article as it stands limits the listing as *nomina rejicienda to nomina confusa, nomina ambigua,* and names based on monstrosities to instances where they upset the names of well known etc. species. This limitation should apply only to the resurrection of overlooked or little used names and to *nomina confusa incipientia. Nomina confusa, nomina ambigua* and names based on monstrosities should be rejected, and listed as *nomina rejicienda* regardless of whether the species to which they refer are well known etc. or not.

A. A. Bullock
E. Milne-Redhead
R. Melville
V. S. Summerhayes
J. B. Gillett
R. W. J. Keay
E. M. Wakefield

An additional note on the proposed conservation of the generic name *Pherosphaera*

by

J. Garden & L. A. S. Johnson (Sydney)

Although we have no strong wishes concerning the conservation of the generic name *Pherosphaera* sensu Hook. f. against *Pherosphaera* Archer and *Microstrobos* Garden & Johnson we would point out that neither of the proposals for its conservation published in this journal (Elliott in Taxon 2 (6) : 141, 1953 and Barber in Taxon 2 (8) : 214, 1953) gives the "case against" as requested by Dr Sprague in Taxon 1 (1) : 14, 1951.

Before re-naming this genus we considered the possibility of conservation but decided against making a proposal, partly from a reluctance to add to the growing list of *nomina generica conservanda* and partly from a feeling that the grounds for conservation were not strong and that, after a long period of uncertainty, the application would eventually be rejected.

The genus *Pherosphaera* sensu Hook. f. consists of only two species of limited range and no economic importance and one of these, the type species, has no legitimate name under *Pherosphaera*.

Since it is impossible to conserve the *specific* name *P. hookeriana* in Hooker's sense this binomial cannot be given as the name of the type species of *Pherosphaera* sensu Hook. f. non Archer. The type species will have to be that selected by Hooker and the only legitimate name for this at present is *Microstrobos niphophilus* Garden & Johnson.

In order to cite the type species in accordance with Appendix V(B) of the International Code of Botanical Nomenclature (1952) it will be necessary to make the new combination under *Pherosphaera* based on the above name. The actual type specimen of this species is, of course, that cited by Hook. f., Fl. Tasm. 1 : 355, 1860, i.e. "Mountains near Lake St. Clair, Gunn".

Nom. Cons. Prop.
Pherosphaera Hook. f., Fl. Tasm. (1860), etc.

T.: *Microstrobos niphophilus* Garden & Johnson (1950).

(P. hookeriana Hook. f. (1860) non Archer (1850)).

Nom. Rejic. Prop.
Pherosphaera Archer (1850).

T.: *P. hookeriana* Archer (1850).
Microstrobos Garden & Johnson (1950).

T.: *M. niphophilus* Garden & Johnson (1950).

THE SYNOPSIS OF PROPOSALS FOR THE EIGHTH CONGRESS

by

F. R. Fosberg (Falls Church, Va.)

Again Professor Lanjouw has performed the Herculean task of organizing and commenting upon the flood of proposals which must be considered by the Nomenclature Section at the Paris Congress. Even with the aid of a "Pré-congrès" of eminent botanists, gathered at Geneva early in the year the mere sifting through, critically, of such a mass of proposals is a major accomplishment. In fact, the task may well have been made more difficult, rather than less, by the actions of the Pré-congrès. Certainly the volume of proposals was increased thereby.

That there should be such a flood of proposals to emend the Stockholm Code within a year and a half of its appearance, while indicating a wide interest in an orderly nomenclature, is a matter for serious concern. Close study of many of these proposals shows that they have not been well thought out, and it seems rather certain that they will not be taken seriously by the Congress. Many of the others indicate a serious misunderstanding of the philosophy that has always underlain the rules since they were first formulated, i.e. the idea that they should serve as a guide, not necessarily spelling out every individual case.

In his introduction to the synopsis Lanjouw has reiterated this philosophy. He has also sounded a warning that if we continue to make major changes in the Code, we risk a loss of confidence in rules of nomen-

clature. However, in his handling of the proposals Lanjouw, himself, seems at times to have forgotten his own warning. One could suggest also that it might have been well if the members of the Geneva Conference had read the Rapporteur's introduction before their meeting and had kept these ideas in mind while discussing the proposals. Because, in the comments and propositions which they have inserted into this synopsis, and which carry the weight of the Rapporteur's influence and the prestige of the Geneva gathering, are suggestions for major changes both in the organization and in the meaning of the rules.

The Stockholm Code is essentially the Vienna Code, improved in the fifty years since its original drafting in accordance with the experience of many botanists in applying it, and modified somewhat to accomodate advances in botanical thought. It is a familiar document, one that botanists have gradually become accustomed to using. Fifty years of effort on the part of those taxonomists who have realized the value of an orderly nomenclature, based on a code of rules, have brought about this familiarity and have created a disposition to follow these rules as best we are able. This has not, of course, brought about fixity of names or more than relative stability in nomenclature. Such is an impossibility as long as taxonomy advances and as long as botanists (and horticulturists, foresters, and ecologists) make mistakes.

If such major changes as the proposed arrangement in divisions and a large number of chapters, the incorporation of large amounts of appendix material in the body of the Code, and the further departures from the principle of priority are adopted, the Code will no longer be a familiar document. Those who, with no particular interest in the legal aspects of nomenclature, have nevertheless made the effort to master the rules so as to be able to use correct names in their work will now be dismayed by having this to do over again. They will also find that some principles that they have taken as guides have either been deleted or have been made the subject of such exceptions that they mean little any more. This will tend neither to sustain interest in correct nomenclature nor to preserve confidence in or respect for the Code. And one looks in vain for evidence of compensating benefits which will result from the present suggested overhauling.

The major innovation among all of the proposals is the creation of lists of rejected names, another form of the old idea of conservation which has been so drastically voted down in the past for names of species. The imagined benefits from these proposed lists will depend entirely upon the competence of the committee members who are willing to take on the burden of critical examination of proposals. The experience of those who worked on the names of genera proposed for conservation for the Paris Congress will not likely dispose them to be willing to take on a flood of proposals of specific names or epithets for rejection. It would indeed be hard to find a competent group to form the special committees necessary for such a task. There is, also, little doubt that it would mean a full time job for those who do consent to serve, at least for the first few years. It is certainly to be hoped that the Paris Congress will follow the clear example of its predecessors and categorically reject this idea even in its new disguise.

It would certainly be a pity to delete Article 3, whether or not it is superfluous. It is one of the most important guide-posts in the Code, and is one that is especially needed now, when everyone is indulging in these proposals for modification of the Code. If this principle had been carefully considered by everyone, nine tenths of the present rush of proposals would never have been made.

There is no intention at this time of going into a detailed criticism of the individual proposals. It is hoped that directing attention to the need for conservatism in this matter will bring about some thought on them. It does seem necessary, however, to call attention to the fact that such proposals as that to close the list of nomina conservanda (Prop. E under Art. 24) and that to forbid modification of the Code within 10 years after the next edition has been published (Prop. C under Former Chapter IV) have the effect of forbidding action by future International Congresses. This would be possible only in a dictatorship. Let us hope that the common sense of future Congresses can be depended upon without resort to such edicts.

Gefahren der bisherigen Entwicklung der internationalen Nomenklaturregeln

von

R. Mansfeld (Gatersleben)

Von Seiten derer, die wissenschaftliche Pflanzennamen benutzen müssen, ohne selbst am System zu arbeiten, wird meist verlangt, die internationalen Regeln für die botanische Nomenklatur sollten eine einheitliche und unveränderliche Benennung der Gruppen des Systems herbeiführen und gewährleisten. Das ist aber nicht allgemein mit irgendwelchen Regeln zu erreichen. Mit dem Fortschreiten der botanischen Erkenntnis müssen immer wieder viele Gruppen des Systems in ihrer Umgrenzung, Stellung und Rangstufe verändert werden und das bedingt vielfach auch Änderungen der Namen. Derartige Namensänderungen sind ganz unvermeidlich und werden notwendig sein, solange es eine botanische Forschung gibt.

Neben solchen Namensänderungen, die durch Veränderungen im System zwangsläufig entstehen, hat es aber seit der Einführung der linnéischen Benennung 1753 eine Fülle von Namensänderungen gegeben, die dadurch entstanden, dass man bei der Bildung und Anwendung der Namen von sehr verschiedenen Gesichtspunkten ausging. Solche "prinzipiellen" Namensänderungen zusammen mit den auf verschiedener systematischer Bewertung beruhenden haben dazu geführt, dass bekanntlich fast jede ältere Gruppe des Systems eine mehr oder weniger lange Reihe verschiedener Namen oder Synonyme besitzt; ausserdem ist in nicht wenigen Fällen derselbe Namen, homonym, für verschiedene Gruppen verwendet worden. Trotzdem bildeten sich im Laufe der Zeit für eine beträchtliche Zahl von Gruppen gewohnheitgemäss einheitliche Namen heraus, besonders für Familien und Gattungen, viel weniger für Arten.

Als es sich dann als ganz unumgänglich nötig erwies, die Benennung der Gruppen auf einheitliche Grundsätze zu gründen, musste die Hauptaufgabe der dazu zu schaffenden, international anerkannten Regeln sein, eine einheitliche Auswahl aus den vorhandenen Synonymen und Homonymen herbeizuführen. Mit vollem Recht ist man dabei bemüht gewesen, die bis dahin schon entstandenen einheitlichen Namen beizubehalten. Da diese einheitlichen Namen aber in sehr verschiedener Weise und mehr oder weniger zufällig zustande gekommen waren, konnte ihre Beibehaltung nur so geschehen, dass man gegenüber den als zweckmässig erkannten Grundsätzen für die Namenswahl (insbesondere dem Grundsatz der Priorität) eine Reihe von Ausnahmen schuf (Liste der Nomina generica conservanda, später auch der nomina familiarum; verschiedene Anfangsdaten der Priorität für verschiedene grosse Gruppen u.a.). Die internationalen Regeln von 1905 sind daher kein konsequent aus einigen Prinzipien entwickeltes Schema von Vorschriften, sie stellen vielmehr ein Kompromiss zwischen theoretischen Forderungen (strenge ausnahmslose Regelfassung) und praktischen Gegebenheiten (Erhaltung traditioneller Namen) dar.

Werden die international vereinbarten Regeln befolgt, so darf für jede Gruppe bei bestimmter Stellung, Umgrenzung und Rangstufe nur der den Regeln entsprechend aus den Synonymen (bezw. Homonymen) ausgewählte Name verwendet werden. Ist bei einer bestimmten systematischen Auffassung für alle Gruppen dieser korrekte Name ausgewählt, so ist damit eine einheitliche Nomenklatur vorhanden, die solange erhalten bleibt, als keine Veränderungen im System entstehen. Namensänderungen, die bei uneinheitlich benannten Gruppen jeweils für bestimmte Namen durch die Anwendung der Regeln entstehen und die im Interest der Einheitlichkeit in Kauf genommen werden müssen, hören von selbst auf, sobald die Namenswahl nach den einheitlichen Grundsätzen durchgeführt ist. Wann das eintritt, wann also eine einheitliche Nomenklatur entsteht, hängt davon ab, wie schnell die Auswahl der korrekten Namen vorgenommen werden kann. Die Dauer dieser Arbeit ist zwar begrenzt, wird aber gewöhnlich stark unterschätzt.

Die Durchführung der einheitlichen Namenswahl kann selbstverständlich nur gelingen, wenn die Regeln für die Namenswahl unverändert bleiben. Bisher ist diese Voraussetzung aber leider nicht erfüllt gewesen! Der allererste Versuch einer einheitlichen Regelung (die Lois, Paris 1867) scheiterte völlig. Ein neuer Versuch erfolgte erst 1905 in Wien. Die Wiener Regeln sind zwar die ersten internationalen Regeln genannt worden; ein erheblicher Teil der Bo-

taniker (besonders nordamerikanische) befolgte aber wesentlich andere Grundsätze (American Code, 1907). Ausserdem enthielten die Wiener Regeln noch erhebliche Lücken, die in Brüssel 1910 nur teilweise geschlossen wurden. Erst 1930 kam in Cambridge eine internationale Vereinbarung zustande, die einen gewissen Ausgleich zwischen den Wiener Regeln und dem American Code darstellt (Verwerfung der in Wien zugelassenen jüngeren Homonyme; Einführung der in Wien nicht angenommenen Typenmethode; Beibehaltung der im American Code verworfenen geschützten Namen und anderer Ausnahmen).

Nach unwesentlichen Veränderungen in Amsterdam (1935) wurden in Stockholm neue Regeländerungen beschlossen (tautonyme Benennung der Untergruppen der Gattungen und der Arten; Aufhebung des in Cambridge angenommenen Verfahrens der Verwerfung von nomina ambigua und dubia durch Listen solcher Namen u.a.).

Es sind also seit 1905 mehrfach wichtige Grundregeln geändert worden. Einige dieser Änderungen waren zweifellos nicht zu umgehen, weil wie gesagt die Wiener Regeln unvollständig waren; andererseits hatte der American Code keine Rücksicht auf die Tradition genommen. Die wiederholten Regeländerungen hatten aber ganz natürlich zur Folge, dass es bisher nicht gelungen ist, zu einheitlichen Namen zu kommen. Keine der bisher erschienenen Ausgaben der Regeln konnte sich auch nur annähernd praktisch auswirken, jede war nach mehr oder weniger kurzer Zeit wieder überholt. So trivial die Feststellung ist, dass sich einheitliche Namen nicht herausbilden können, wenn die Regeln ständig geändert werden, so liegen doch für die Nomenklaturberatungen in Paris wieder Vorschläge vor, die neue grundsätzliche Änderungen verlangen: Die seit 1905 bestehende Liste der Nomina conservanda soll jetzt plötzlich geschlossen werden; die bisher geltende Verwerfung der (scheinbar) binären Artnamen von Autoren, die nach 1753 die linnéische Benennung ablehnten, soll neu geregelt oder ganz aufgegeben werden u.a.

Zu diesen beiden Vorschlägen seien zunächst einige Bemerkungen gemacht. Proposal 121 E (zu Art. 24 des Code), die Liste der Nomina conservanda zu schliessen, wird damit begründet, die Botaniker hätten 50 Jahre Zeit gehabt, die nötigen Vorschläge für die Liste zu machen. Diese Begründung ist nach dem oben Gesagten völlig unverständlich. In dieser Zeit sind die Regeln mehrmals geändert worden; sicher sind z.B. noch nicht alle Homonymfälle bei Gattungen erfasst und es ist nicht im geringsten zu übersehen, welche Gattungsnamen durch die Durchführung der Typenmethode (die kaum begonnen hat) fraglich werden. Es sollte auch allgemein bekannt sein, dass viele grosse Familien der Phanerogamen seit vielen Jahrzehnten nicht mehr im Zusammenhang revidiert worden sind, ganz zu schweigen von den Kryptogamen. — Zu der Vorschrift des Art. 79,4 des Code (Verwerfung von Artnamen aus Werken mit nicht echt binärer Nomenklatur), hatte sich nach ausführlicher Diskussion eine eindeutige Tradition gebildet. Man kann also jetzt nicht plötzlich alle binär aussehenden Namen anerkennen, die in Wirklichkeit zweigliedrige Phrasen darstellen und bisher einheitlich verworfen worden sind (Garsault u.a.). Das würde eine unabsehbare Veränderung der Artnomenklatur nach sich ziehen, weil viele solche zweigliedrige Namen in nicht linnéischen Werken nach 1753 auftreten, nämlich in allen Gattungen, in denen zweigliedrige Phrasen zur Unterscheidung der Arten genügten. Werke wie die von Gilibert, der das linnéische Benennungsverfahren annahm, bei dem aber wie bei Linné selbst noch fehlerhaft gebildete Namen vorkommen, sind dagegen bisher allgemein berücksichtigt worden (unter selbstverständlicher Verwerfung der fehlerhaften Namen); es besteht durchaus kein zwingender Grund, sie jetzt auszuschalten oder die Zulassung solcher Werke von einem komplizierten Verfahren der Auszählung der fehlerhaften Namen abhängig zu machen, ganz abgesehen davon, dass derartige Vorschriften in der Durchführung äusserst unbequem sind.

Solche wie viele andere seit 1905 immer wieder auftauchende Vorschläge zeigen die Tendenz, die Tradition mehr und mehr beiseite zu schieben, sowohl bezüglich der älteren Nomenklatur wie bezüglich der Auslegung und Anwendung der Regeln. Manche zeigen auch deutlich, dass die Kenntnis der Entstehung der Regeln und der Gründe für ihre meist lange erwogene Formulierung immer geringer wird. Die Tendenz zur Vernachlässigung der Tradition entspringt z.T. dem Bestreben, in den Regeln zugelassene Ausnahmen zu beschränken. Das ist aber nur theoretisch bis zu einem gewissen Grade berechtigt. Es bedeutet eine grundsätzliche Abkehr von der Haltung, die die Regeln bisher gegenüber der Tradition eingenom-

men haben. Gibt man diesen Bestrebungen nach, so schafft man praktisch neue Regeln. Das führt unweigerlich zu demselben Ergebnis, dass die Einführung der linnéischen Nomenklatur 1753 hatte, nämlich einer gewaltigen Erschwerung der Benutzbarkeit der älteren Literatur mit allen ihren schädlichen Folgen. Man würde auch genau so von neuem beginnen müssen wie 1905.

Davor kann nicht genug gewarnt werden. Die bisherigen Regeländerungen haben nicht nur die Entstehung einer einheitlichen Nomenklatur, soweit eine solche durch Regeln zu erreichen ist, immer wieder hinausgeschoben, sie haben auch die Bemühungen, die den Regeln entsprechenden Namen zu ermitteln, zu einer Sisyphusarbeit gemacht! Hatte man eine Gruppe nomenklatorisch überprüft, so war man bis jetzt nach jedem Kongress gezwungen, diese mühsame und zeitraubende Arbeit zu wiederholen. Jeder, der wie ich unter der Geltung der Wiener Regeln zu arbeiten begonnen hat, wird das aus eigener Erfahrung bestätigen müssen. Das ist selbstverständlich ein unerträglicher Zustand. Ein anderer Gesichtspunkt ist aber noch viel bedenklicher. Es ist nicht leicht, Aussenstehenden die Notwendigkeit von Namensänderungen infolge der Durchführung einheitlicher Regeln verständlich zu machen und die allgemeine Anwendung geänderter Namen zu propagieren. Ist man aber gezwungen, wiederholt Namen zu ändern, die man als korrekt empfohlen hat, so kann es auf die Dauer unmöglich gelingen die Verwendung "regelgemässer" Namen zu erreichen. Ständige Regeländerungen müssen unausbleiblich die internationale Regelung ad absurdum führen! Regeländerungen dürfen nur vorgenommen werden, wenn sie sich aus Fortschritten der Erkenntnis als zwingend notwendig erweisen. Andernfalls wird die mühsam errungene internationale Einigung auf das höchste gefährdet. Man sollte doch nicht vergessen, dass die Regeln nie jeden Einzelfall allgemein befriedigend lösen können. Dazu sind die Verschiedenheiten der Einzelfälle und der Meinungen darüber viel zu gross. Wesentlich ist nicht die Formulierung der Regeln, sondern dass eine einmal gegebene Formulierung beibehalten wird!

Eine der wenigen seit 1905 angenommenen Regeländerungen, die tatsächlich nötig waren, ist die Einführung der Typenmethode 1930. Die wichtigste Frage dabei war, wie die nachträgliche Wahl des Typus einer Gruppe erfolgen soll, wenn der Autor einen Typus nicht angegeben hat. Entsprechend der Grundhaltung der Regeln hätte dabei die traditionelle Anwendung der Namen von Gruppen, die später aufgeteilt worden sind, beibehalten werden müssen. 1930 wurde aber eine entsprechende Empfehlung nur für Pilze gegeben; allgemeine Vorschriften für die nachträgliche Wahl eines Typus sollten dem nächsten Kongress vorgelegt werden (3. Ausgabe der Regeln, p. 26, 54, 84, ausdrücklicher Hinweis auf einen später zu gebenden Appendix I mit solchen Vorschriften). Es war offenbar nicht gelungen, eine Einigung zwischen den Vertretern der traditionellen Einstellung der Regeln und den Anhängern einer strengen ausnahmslosen Typisierung eine Einigung zu erzielen. Erst 1950 wurden die fehlenden Anweisungen gegeben (Appendix I des Code). Leider wird darin auf die traditionelle Anwendung der Namen zugunsten der strengen Typisierung keine oder sehr wenig Rücksicht genommen. Es wird z.B. in Appendix I 4 d für den Fall verschiedener Aufteilung einer Gruppe gesagt, eine frühere Aufteilung müsse beibehalten werden, wenn sie der strengen Typisierung entspricht; eine nicht den strengen Typus enthaltende Anwendung eines Namens soll rückgängig gemacht werden; ein Lectotypus soll zwar dem herrschenden Gebrauch entsprechend gewählt werden, aber nur, wenn nicht ein anderes Element besser zu der Originalbeschreibung bezw. Abbildung passt. Nun entspricht aber die traditionell üblich gewordene Aufteilung von Gattungen und Arten durchaus nicht immer diesen Vorschriften; es wird sich daher in unübersehbar vielen Fällen die Notwendigkeit ergeben, Namen in anderem Sinne zu verwenden als bisher. Einige Beispiele für Gattungen und Arten (bei denen die Sachlage vielfach noch schwieriger ist) hat kürzlich O. Schwarz gegeben (Taxon 3, 80-82. 1954) *). Ich habe auf die Gefahren der nachträglichen strengen Typisierung schon wiederholt hingewiesen (Die Technik der wissenschaftlichen Pflanzenbenennung, 1948). Die entstehenden Namensvertauschungen sind das schädlichste, was es in der Nomenklatur gibt, sie wären nur so zu

*) Seine Ausführungen beziehen sich zwar noch auf die 3. Ausgabe der Regeln, sie zeigen aber, was sich bei verschieden aufgeteilten Gruppen ergibt, wenn man strenge Priorität anwendet. Die vorgeschlagene Lösung halte ich für unannehmbar.

vermeiden, dass man die Namen ganz verwirft oder die bisherige Anwendung konserviert, was für Arten unmöglich ist und bei Gattungen durch den oben erwähnten Vorschlag des Schliessens der Liste unmöglich würde. Niemand kann aber voraussehen, für wieviele Namen bei solchem Vorgehen sich Änderungen ergeben würden; niemand kann sagen, wieviele ältere Gattungen und Arten überhaupt schon auf ihre Typisierung überprüft sind und was sich bei strenger Typisierung mit der Zeit noch herausstellen wird. Ich halte für den einzigen Weg zur Vermeidung so unabsehbarer Folgen für die Nomenklatur den, allgemein zu verlangen, dass Lectotypen der traditionellen Anwendung der Namen entsprechen müssen, soweit es sich um schon aufgeteilte Gruppen handelt.

Vor der hier nur kurz angedeuteten Entwicklung und ihren Gefahren habe ich schon früher gewarnt (l.c. 1948). Ich möchte diese Warnung hier nachdrücklich wiederholen und die dringende Forderung erheben, die Tradition in den Regeln zu wahren und die ständigen Änderungen an den Regeln einzustellen. Verfährt man anders, so wird man die internationalen Regeln und damit die Nomenklatur früher oder später völlig zerstören.

NOMINA GENERICA CONSERVANDA

The General Committee and Advisory Board have studied the following reports on nomina conservanda proposita:

1. *Musci:* Taxon 1: 40
2. *Hepaticae:* ib. 1: 80
3. *Bacillariophyta:* ib. 1: 95
4. *Pteridophyta:* ib. 2 : 12, 3 : 71
5. *Fungi:* ib. 2: 30
6. *Phanerogamae:* ib. 3: 112
7. *Musci:* Dixon's list, Code 78—80.

The General Committee and Advisory Board approve the conservation of the following generic names and submit this list for final approval to the VIIIth International Botanical Congress, Paris, 1954. (Full details are given in the above-mentioned communications).

MUSCI

Barbula Hedw.
Bartramia Hedw.
Ephemerum Hampe
Hedwigia Beauv.
Helodium Warnst.
Meesia Hedw.
Myrinia Schimp.
Timmia Hedw.
Tortula Hedw.
And all names figuring on Dixon's list, Code p. 78—80.

HEPATICAE

Adelanthus Mitt.
Androcryphia Nees
Diplophyllum Dumort.
Gymnomitrion Corda
Plagiochasma Lehm. & Lindenb.
Radula Dumort.
Scapania Dumort.
Lembidium Mitt.
Lepidozia (Dumort.) Dumort.
Mastigophora Nees (1838)
Reboulia Raddi corr. Nees
Treubia Goeb.
Trichocolea Dumort. corr. Nees
Bazzania S. F. Gray corr. Carringt.
Marchesinia S. F. Gray corr. Carringt.
Mylia S. F. Gray corr. Lindb.
Nardia S. F. Gray corr. Carringt.
Pallavicinia S. F. Gray corr. Trev.
Riccardia S. F. Gray corr. Trev.

BACILLARIOPHYTA

Arachnoidiscus Deane ex Pritch.
Aulacodiscus Ehrenb.
Auricula Castr.
Brebissonia Grun.
Cymatopleura W. Smith
Diatoma Grun.
Diatomella Grev.
Didymosphaenia M. Schmidt
Eupodiscus Rattray 1888
Gomphonema Hustedt
Gyrosigma Hass.
Licmophora C. Ag.
Melosira Kütz.
Nitzschia Hass.
Pantocsekia Grun. ex Pant.
Peronia Bréb. & Arn. ex Kitton
Pinnularia Ehrenb.
Pleurosigma W. Smith
Podocystis J. W. Bail. ex W. Smith
Rhabdonema Kütz.
Rhizosolenia Brightw.

PTERIDOPHYTA

Angiopteris Hoffm.
Coniogramme Fée

Gleichenia Smith
Schizaea Smith
Anemia Sw.
Araiostegia Copel.
Cheilanthes Sw.
Danaea Smith
Drymoglossum Presl
Lygodium Sw.
Matteucia Todaro
Pellaea Link
Spenomeris Maxon.

PHANEROGAMAE

23 *Cedrus* Trew.
492 *Rhynchospora* Vahl
542 *Pritchardia* Seem. & Wendl. ex Wendl.
747 *Peltandra* Raf.
1857 *Houttuynia* Thunb.
1891 *Castanopsis* (D. Don) Spach
1893 *Cyclobalanopsis* Oerst.
1946 *Artocarpus* J. R. & G. Forst
2045 *Grevillea* R. Br. ex Salisb.
2209 *Coccoloba* P. Br. ex L.
2656 *Schisandra* Michx.
2797 *Neolitsea* (Benth.) Merr.
2956 *Rapistrum* Crantz
2988 *Neslia* Desv.
3131 *Darlingtonia* Torr.
3225 *Brexia* Noronha ex Thouars
3682 *Sarothamnus* Wimmer
3848 *Inocarpus* J. R. & G. Forst.
3947 *Durandea* Planch.
3991 *Fagara* L.
4031 *Correa* Andrews
4190 *Guarea* Allem. ex L.
4449 *Trigonostemon* Blume
4470 *Endospermum* Benth.
4501 *Pedilanthus* Neck.
—— *Tithymalus* Trew
4578 *Campnosperma* Thwaites
4862 *Condalia* Cav.
5018 *Thespesia* Soland. ex Correa
5543 *Bucida* L.
5852 *Schefflera* J. R. & G. Forst.
6070 *Selinum* L.
6260 *Epacris* Cav.
6291 *Labisia* Lindl.
6373 *Dipholis* A.DC.
6410 *Halesia* Ellis ex L.
6421 *Forsythia* Vahl
7003 *Pharbitis* Choisy
7800 *Ramonda* Rich.
7809 *Didissandra* C. B. Clarke
8209 *Cosmibuena* Ruiz & Pav.
8237 *Acranthera* Arn. ex Meisn.
8598 *Citrullus* Schrader
8926 *Conyza* Less.
9425 *Dimorphotheca* (Vaill.) Moench

RECUEIL SYNOPTIQUE
Additions and Corrections

Art. 16

p. 29, 30. *Observations du Rapporteur.* The English text does not agree with the French one. The adoption of prop. E is dissuaded.

Art. 27

Additional prop. C. (180 — Berlin Botanists) See Taxon 3(4) : 101 . 1954. "Suborders are designated in a similar manner, with the ending *-inales*".

Art. 33

p. 53. *Observations du Rapporteur.* The English text does not agree with the French one. The adoption of prop. E is dissuaded.

*

Additional prop. I (182 — St John) See Taxon 3(4) : 123 . 1954. "Epithets of species or of subdivisions of species may be taken from any source whatever, and may even be composed arbitrarily".

Art. 42

Prop. D. The proposal should be supplemented in accordance with the full version given in Taxon 3 : 17. "The first paragraph be altered to read ... 'or by a reference to a previously validly published description of it'."

Art. 59

Prop. A (182 — St John) See Taxon 3(4) : 123 . 1954. (Inferred original author's name to be cited enclosed in braces).

New Art. 77 bis

Prop. A (183 — Grumman) See Taxon 3(4): 124 . 1954 (Introduction abbr. *ter.* for *teras*).

Art. 79(3)

Additional prop. I (182 — St John) See Taxon 3(4) : 124 . 1954. Delete "with or without the addition of a transcribed symbol".

Nomina generica conservanda

p. 119 *Woodsia* R. Br. is listed under *Apocynaceae;* the name should be transferred to *Pteridophyta.*

*

Prop. 184 by C. Kalkman to conserve the name *Garuga* Roxb. of the Burseraceae; see Taxon 3(4) : 124 . 1954.

Prop. 185 by O. Mårtensson to conserve the name *Orthothecium* Br. eur. of the Musci; Taxon 3(4) : 125 . 1954.

Prop. 186 by R. Singer to conserve the name *Rhodophyllus* Quélet (t.: *Rh. lividus* (Bull. ex Fr.) Quél.) Cf. Singer, Lilloa 22 : 611, foot note 135, Schweiz. Zschr. Pilzk. 29 : 224 . 1951. (This proposal was duly submitted by the author before 1 Dec. 1953 but by an oversight of the editors it was neither published in Taxon nor in the Rec. Syn.).

PRELIMINARY MAIL VOTE

On 22 May of this year 315 votes had been received at the International Bureau. The result of this preliminary vote on the nomenclature proposals submitted to the Paris Congress is given below. The final result will be communicated at the sessions of the section Nomenclature.

	Yes	No	Ed. Com.	Sp. Com.
Title				
A	20	241	13	—
B	17	196	50	3
C	160	43	65	—
Chapter I				
A	29	208	37	—
B	176	47	51	—
Art. 1				
A	12	254	1	—
B	4	260	3	—
C	213	55	5	—
Art. 2				
A	15	244	15	—
B	206	45	26	—
Art. 3				
A	10	256	2	—
B	199	80	2	—
Art. 4				
A	16	256	—	—
B	215	47	11	—
Art. 5				
A	24	231	16	—
B	162	117	4	—
Art. 6				
A	207	61	5	—
Art. 7				
A	55	210	6	—
B	184	78	9	—
Art. 8				
A	10	244	13	—
B	12	249	11	—
C	183	44	54	—
Art. 9				
A	5	262	10	—
B	3	258	13	—
C	147	118	13	—
D	194	78	14	—
Art. 10				
A	166	75	44	—
B	24	103	158	—
C	30	81	170	—
D	42	55	182	—
E	28	58	191	—
Art. 11				
A	140	92	36	2
B	181	42	51	2
New Princ. IX				
A	224	35	8	9
New Princ. X				
A	215	39	14	—
Chapter II				
A	12	252	8	3
B	192	44	40	—
Art. 12				
A	12	263	9	—
B	158	65	52	—
Art. 13				
A	1	250	11	—
B	115	134	12	—
C	12	254	4	—
D	19	249	4	—
E	184	69	26	—
Art. 14				
A	12	243	7	—
B	177	64	36	—

	Yes	No	Ed. Com.	Sp. Com.
Art. 15				
A	14	266	4	—
Ch. III				
A	12	220	32	—
B	180	40	56	—
Sect. 1				
A	21	186	53	—
Art. 16				
A	15	259	10	—
B	18	84	170	—
C	40	53	179	3
D	61	48	165	—
E	49	177	51	—
F	43	58	—	1
G	36	226	24	—
Art. 17				
A	19	250	8	8
B	29	238	8	8
C	184	89	7	8
Rec. 17A				
A	116	145	15	—
B	201	60	17	—
Sect. 2				
A	22	243	14	—
Art. 18				
A	28	217	10	—
B	11	231	15	—
C	150	107	10	—
D	164	98	16	—
E	214	25	13	—
New Rec. 18A				
A	208	45	10	—
Art. 19				
A	18	213	36	—
B	12	207	48	—
C	151	75	37	—
Rec. 19A				
A	24	243	6	—
Rec. 19B				
A	59	164	44	—
B	45	176	44	—
New Rec. 19C				
A	213	48	9	—
New Rec. 19D				
A	214	36	10	1

	Yes	No	Ed. Com.	Sp. Com.
Art. 20				
A	23	84	164	—
B	56	47	162	—
C	8	260	6	—
D	18	52	193	—
Art. 21				
A	18	237	19	2
B	90	94	21	66
Art. 23				
A	8	131	32	86
B	6	228	8	11
C	16	39	53	102
D	4	75	17	160
E	30	50	9	144
F	14	213	10	16
G	4	240	10	8
H	141	86	22	12
I	161	73	21	15
Art. 24				
A	54	60	155	1
B	58	196	3	—
C	12	255	3	—
D	19	244	1	—
E	91	171	3	—
F	7	248	5	—
G	37	79	154	—
H	128	140	15	—
New Art. 24bis				
A	11	258	2	3
B	122	140	12	—
Art. 25				
A	198	20	51	—
Sect. 4				
A	108	119	35	—
B	172	51	34	—
Art. 26				
A	19	265	—	—
B	215	72	1	—
Rec. 26A				
A	24	242	17	—
B	139	143	2	—
Art. 27				
A	80	172	32	—
B	94	184	10	—
Art. 28				
B	32	98	155	1
C	64	58	150	—
D	41	121	118	1
E	48	148	67	2

	Yes	No	Ed. Com.	Sp. Com.
New Rec. 28A				
A	16	123	149	—
Art. 29				
A	140	56	79	—
B	18	256	10	—
C	145	49	81	—
D	3	91	174	—
Art. 30				
A	11	263	16	—
Rec. 30A				
A	29	238	11	—
B	117	82	82	—
C	136	61	84	—
Art. 31				
A	202	37	36	—
B	189	35	44	—
C	199	26	46	—
D	220	23	29	—
Art. 32				
A	10	254	7	—
B	161	89	39	—
C	184	64	38	—
D	16	257	2	—
E	129	123	25	—
F	179	73	25	—
G	179	85	23	—
Subsect. 5				
A	126	85	58	—
B	1	283	4	—
Art. 33				
A	88	96	82	—
B	102	87	84	—
C	11	263	6	—
D	95	77	107	—
E	83	149	16	—
F	32	58	180	—
G	1	280	1	—
H	227	47	10	—
New Art. 33bis				
A	3	290	1	—
New Art. 33bisA				
A	1	286	1	—
Rec. 33A				
A	58	223	1	—
B	195	98	—	—
Rec. 33B				
A	17	271	1	—
B	16	278	1	—

	Yes	No	Ed. Com.	Sp. Com.
Rec. 33C				
A	30	243	3	—
B	18	239	22	—
C	25	230	15	—
D	154	121	8	—
New Rec. 33D				
A	10	256	12	—
Subsect. 6				
A	22	247	12	—
B	237	40	12	—
Art. 34				
A	11	224	25	9
B	32	114	107	—
C	44	103	110	—
D	54	38	155	—
E	25	62	170	—
Art. 35				
A	9	260	12	—
B	21	262	17	—
C	31	250	17	—
Rec. 37B				
A	9	266	1	—
Art. 38				
A	46	216	7	—
Sect. 5				
A	28	188	44	—
B	175	45	47	—
Art. 39				
A	74	44	26	121
B	74	57	24	119
C	74	37	39	119
D	94	43	25	117
E	6	129	31	111
F	3	144	22	110
Art. 42				
A	2	255	8	—
B	12	242	7	—
C	13	238	24	—
D	9	105	52	—
E	162	65	45	—
F	20	49	193	—
Rec. 42A				
A	262	14	4	—
Art. 43				
A	37	221	16	—
B	190	86	1	—

	Yes	No	Ed. Com.	Sp. Com.
Art. 44				
A	8	285	1	—
B	7	273	1	8
C	70	188	9	—
D	25	77	148	—
E	167	88	8	—
F	191	74	10	—
New Art. 44bis				
A	53	173	30	—
B	74	158	30	—
C	178	63	49	—
Art. 45				
A	32	47	18	173
B	32	50	18	170
Art. 48				
A	18	206	23	—
B	11	216	24	—
C	60	173	12	—
D	28	208	21	—
E	170	74	22	—
Art. 50				
A	79	21	185	—
B	76	14	189	—
C	48	42	177	—
Art. 51				
A	259	20	5	—
Art. 52				
A	4	261	5	6
B	7	224	18	—
C	9	137	57	—
D	7	126	64	—
E	67	41	147	—
F	97	153	33	—
G	76	33	147	—
H	35	55	161	—
I	162	83	32	—
Art. 53				
A	45	88	147	—
Art. 54				
A	32	193	64	—
New Art. 54bis				
A	26	249	8	9
Rec. 54A				
A	22	214	25	—
B	173	89	20	—
Rec. 54D				
A	4	270	4	—
B	258	27	5	—
Rec. 54E				
A	30	248	4	—
B	4	272	3	—
Rec. 54F				
A	2	271	3	—
Rec. 54I				
A	14	23	242	—
Art. 55				
A	29	13	235	—
Art. 57				
A	11	238	12	—
B	26	62	176	—
Art. 58				
A	6	248	6	—
B	216	48	16	—
Rec. 58A				
B	87	129	44	—
C	27	224	16	—
D	104	118	38	—
Art. 60				
A	207	40	28	—
Rec. 60D				
A	4	265	7	—
Rec. 60F				
A	39	29	200	—
B	13	70	183	—
C	15	44	212	—
Rec. 60G				
A	18	238	19	—
B	232	31	17	—
New Rec. 60I				
A	12	247	8	3
Sect. 8				
A	178	45	47	—
Art. 61				
A	3	262	9	—
New Rec. 62A				
A	131	109	51	—
Art. 63				
A	3	274	7	3
New Art. 63bis				
A	4	291	—	—
Art. 64				
A	240	21	24	—

	Yes	No	Ed. Com.	Sp. Com.
Art. 65				
A	30	74	168	—
B	15	241	21	—
C	22	238	20	—
D	217	31	34	—
Art. 66				
A	49	22	199	—
B	230	21	30	—
Art. 67				
A	5	271	2	—
Rec. 68B				
A	246	28	10	—
Art. 69				
A	191	22	34	27
B	20	172	35	27
Art. 70				
A	9	267	4	—
New Art. 70bis				
A	16	230	15	3
B	216	51	21	—
Art. 71				
A	12	259	5	—
Art. 73				
A	13	259	8	—
B	228	17	38	—
D	55	51	180	—
E	27	235	8	—
F	8	260	4	—
Art. 74				
A	32	83	160	—
B	3	273	8	—
C	158	104	15	—
D	59	206	19	—
New Art. 74bis				
A	52	193	26	—
Art. 75				
A	34	223	13	—
B	36	230	13	—
C	12	244	19	—
D	23	103	150	—
E	35	50	191	—
Art. 76				
A	33	201	18	5
B	15	84	17	163
C	9	90	18	157
D	12	94	159	6
E	17	79	30	144
F	196	63	10	3

	Yes	No	Ed. Com.	Sp. Com.
Art. 77				
A	150	110	13	—
B	150	110	13	—
C	6	237	22	—
D	38	214	22	—
New Art. 78bis				
A	170	100	19	—
New Art. 78bisA				
A	49	161	54	—
B	141	88	38	—
Art. 79				
A	133	99	18	1
B	23	205	22	—
C	36	220	3	3
D	15	253	5	—
E	8	260	5	—
F	15	230	11	3
G	22	225	12	3
H	144	112	11	3
Art. 80				
A	246	23	3	—
B	11	262	—	—
C	8	254	2	—
Art. 81				
A	237	25	11	—
B	42	184	29	—
C	37	191	31	—
D	38	189	31	—
E	12	222	15	—
F	118	144	13	—
Sect. 14				
A	189	46	31	—
Art. 82				
A	41	24	21	187
B	27	28	30	189
C	27	38	29	184
D	46	15	30	186
E	2	29	45	195
F	20	41	28	187
G	28	27	32	189
Rec. 82A				
A	37	34	17	194
B	33	23	32	195
C	6	65	17	188
Rec. 82B				
A	12	51	15	199
B	20	45	14	197
C	16	34	16	208

	Yes	No	Ed. Com.	Sp. Com.
Rec. 82C				
A	78	20	15	168
B	7	59	16	186
C	18	39	17	191
D	44	62	15	147
E	19	41	29	184
Rec. 82E				
A	229	32	2	22
B	9	259	13	2
Rec. 82F				
A	165	64	21	21
B	45	167	29	27
C	48	155	34	26
D	68	124	42	43
Rec. 82G				
A	48	208	1	12
B	62	179	10	12
C	19	229	1	12
D	70	179	3	12
E	10	230	2	12
F	17	231	2	12
G	137	122	1	12
H	1	243	1	12
Rec. 82H				
A	215	19	20	15
B	203	28	22	14
Rec. 82I				
A	27	66	18	163
Rec. 83A				
A	18	199	7	53
B	1	53	18	181
C	20	39	18	187
D	29	36	19	187
E	54	23	18	178
F	9	213	8	40
Sect. 16				
A	3	177	68	9
B	163	35	71	—
Rec. 83C				
A	238	23	11	—
B	221	30	13	—
Rec. 83F				
A	40	125	72	6
New Div. III				
A	36	194	2	9
B	29	201	3	9
C	179	64	3	9
New Chapt. VII				
A	9	249	3	5
B	10	237	3	18
C	11	249	4	5
App. I				
A	44	173	26	1
B	19	199	25	—
C	23	190	35	—
D	164	67	25	—
App. II				
A	40	19	39	154
B	58	42	13	146
C	9	53	39	139
D	20	33	21	157
App. III				
A	18	202	18	2
B	159	63	16	10
App. IV				
A	9	213	4	21
B	4	19	14	208
App. V				
A	83	134	30	3
B	82	166	14	3
App. V-a				
A	23	91	19	115
B	12	65	21	151
App. VI				
A	76	15	150	3
B	56	8	179	4
C	40	32	163	4
App. VII				
A	45	24	19	173
B	43	27	19	173

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